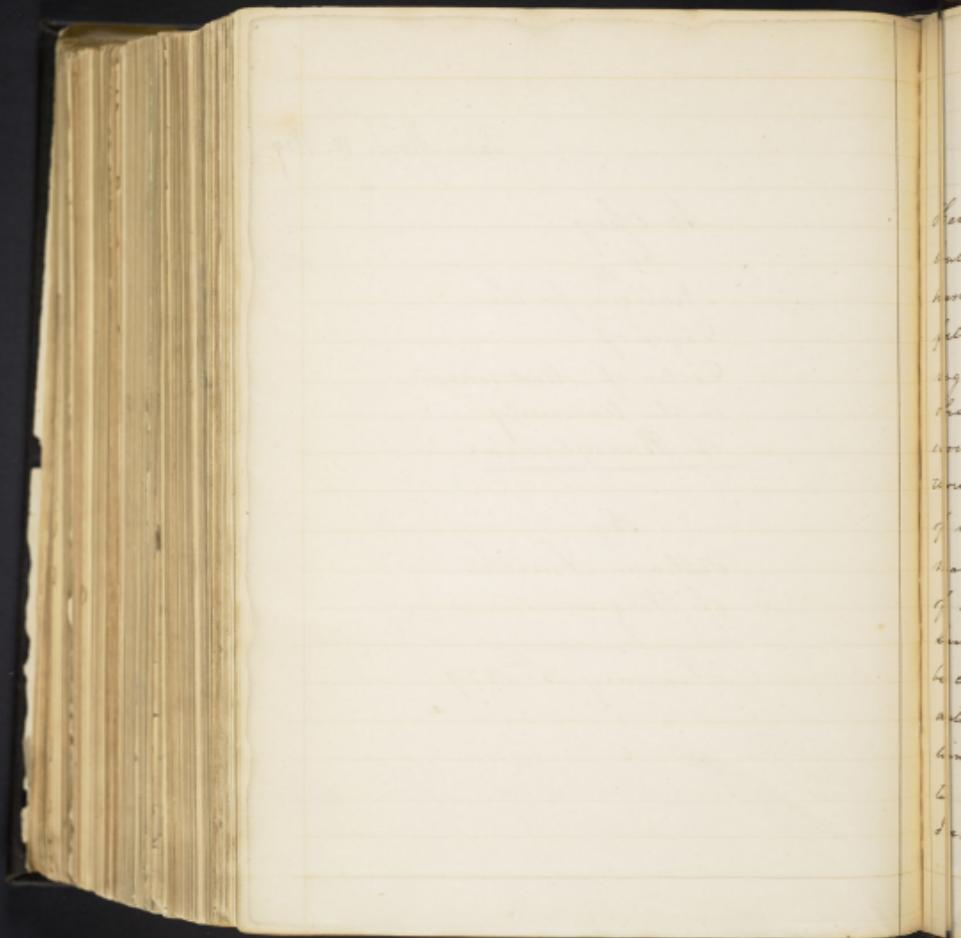


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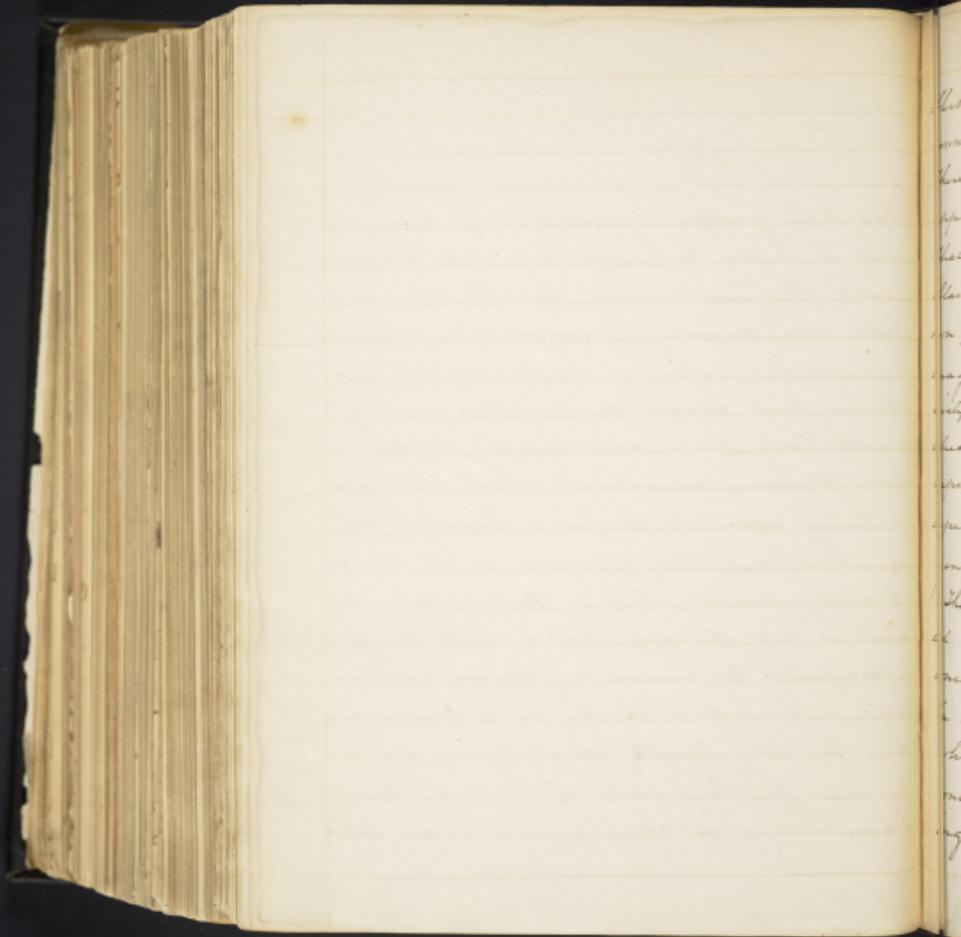
An Essay
on
Neuropathy, for the
Degree of
Doctor of Medicine
in the University
of Pennsylvania.

By
William Smith.
of Virginia.

January 13th 1829.

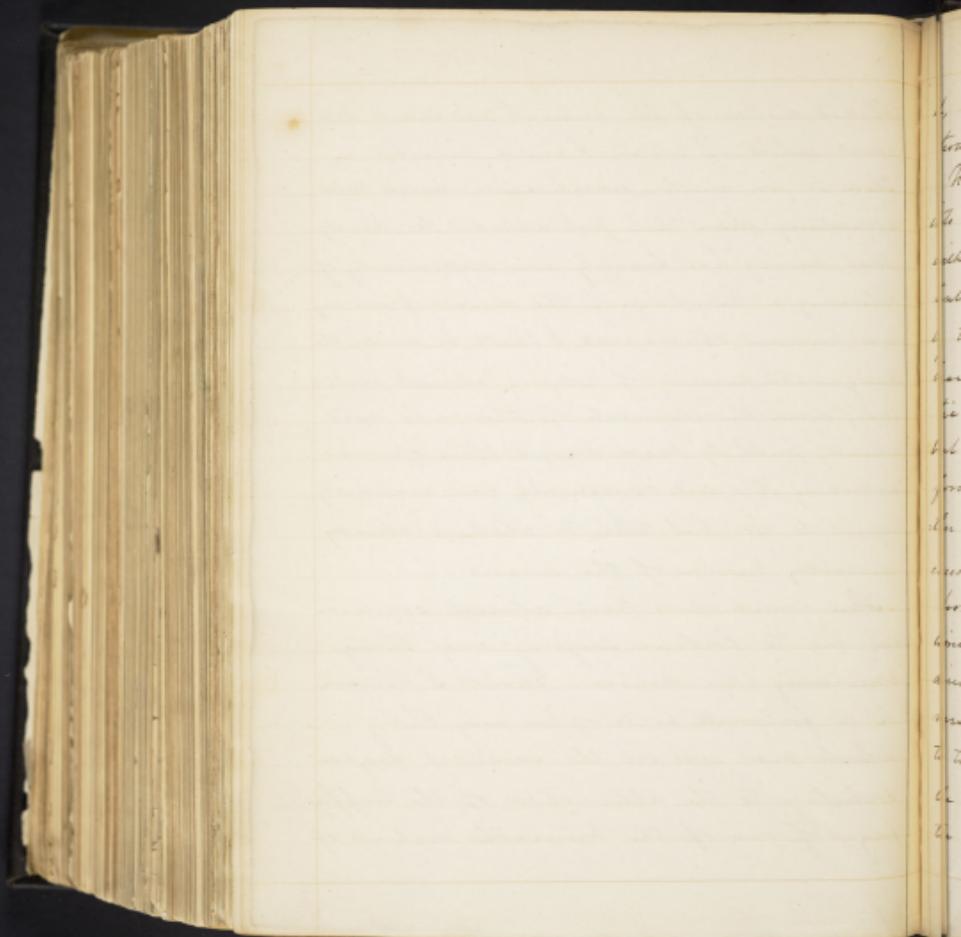


Has I the gratifying prospect of being at
last to make known to those into whose
hands this paper may hereafter chance to
fall, any discovery of importance either as
regards the nature or treatment of this
disease, but hoisted disease this writing
would have been commenced under
those pleasing sensations, which the idea
of being about to confer a benefit on
mankind naturally produces in the mind
of every sensitive being. But unfortunately
such is not the case, and I shall therefore
be compelled to pursue my course, with an
anticipation of little else, as a compensation
for any trouble which I may encoun-
ter, than the bare idea of knowing that
I am acting in concurrence with an estee-



blushed custom of the ancient and much re-
nown'd school of which I am a member -
There is too another consideration, much more
appealing than that just alluded to, namely,
that having had scarcely any opportunity of
obtaining a knowledge of the disease, from my
own personal observations, I shall be under the
disagreeable necessity of relying almost exclus-
ively upon the statements of those who have
already publicly made known their opinions
 respecting it - and consequently can reasonably
 expect to add but little to what is already
 generally known of the disease -

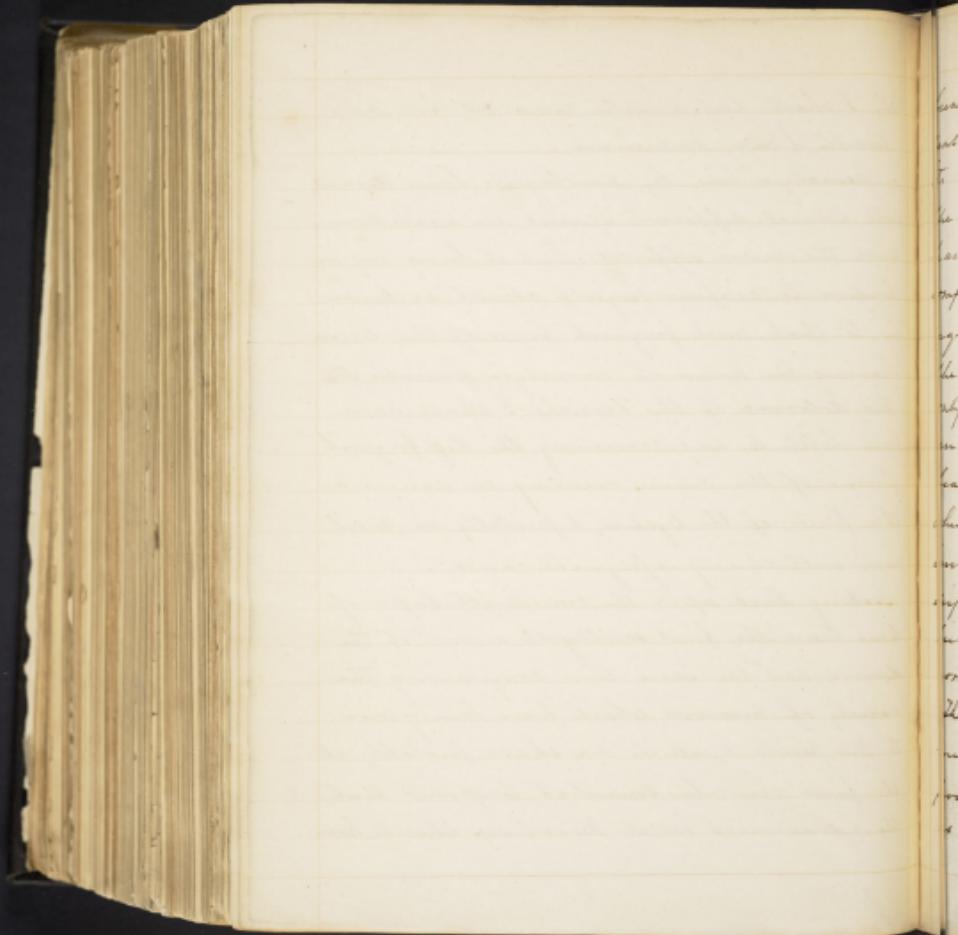
These considerations have almost constrain-
ed me to forbear saying any thing
concerning this disease. Should I however
be so fortunate as to offer any thing
which may even in the smallest degree
contribute to the alleviation of the suffer-
ing of one of the miserable victims of



to, I shall feel amply rewarded for any trouble I may experience.

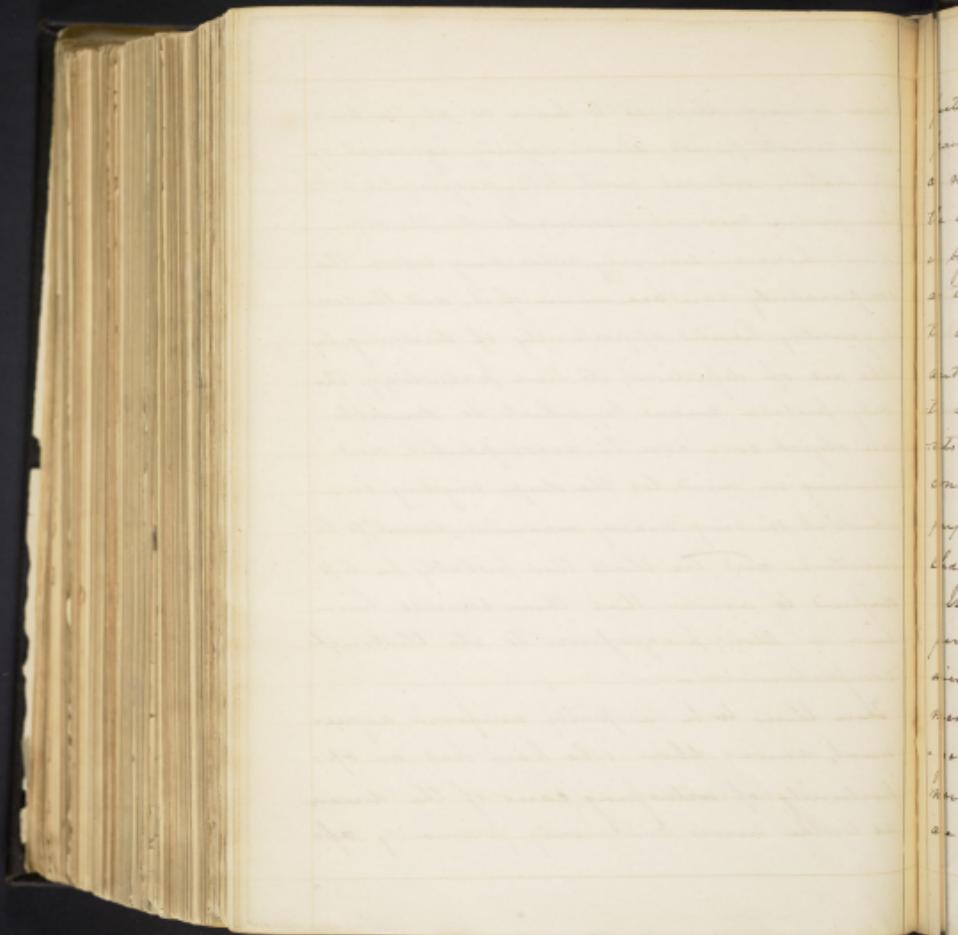
Neuralgia has, by nosologists, been divided into several different species in accordance with the nerves affected; but it being my intention to confirm myself almost exclusively to that most frequent form of the disease bearing the name of neuralgia facialis, the *tic doloureux* of the French, I shall have but little to say concerning the less frequent forms of the disease, occurring in various other parts of the system, & probably in most cases without any assignable cause.

Looking back upon the considerable lapse of time since the first intelligible account of the disease, and the same time considering the variety of memoirs which have been given to the public upon it, we shall probably at the first view be somewhat surprised that the advancement in its knowledge should have



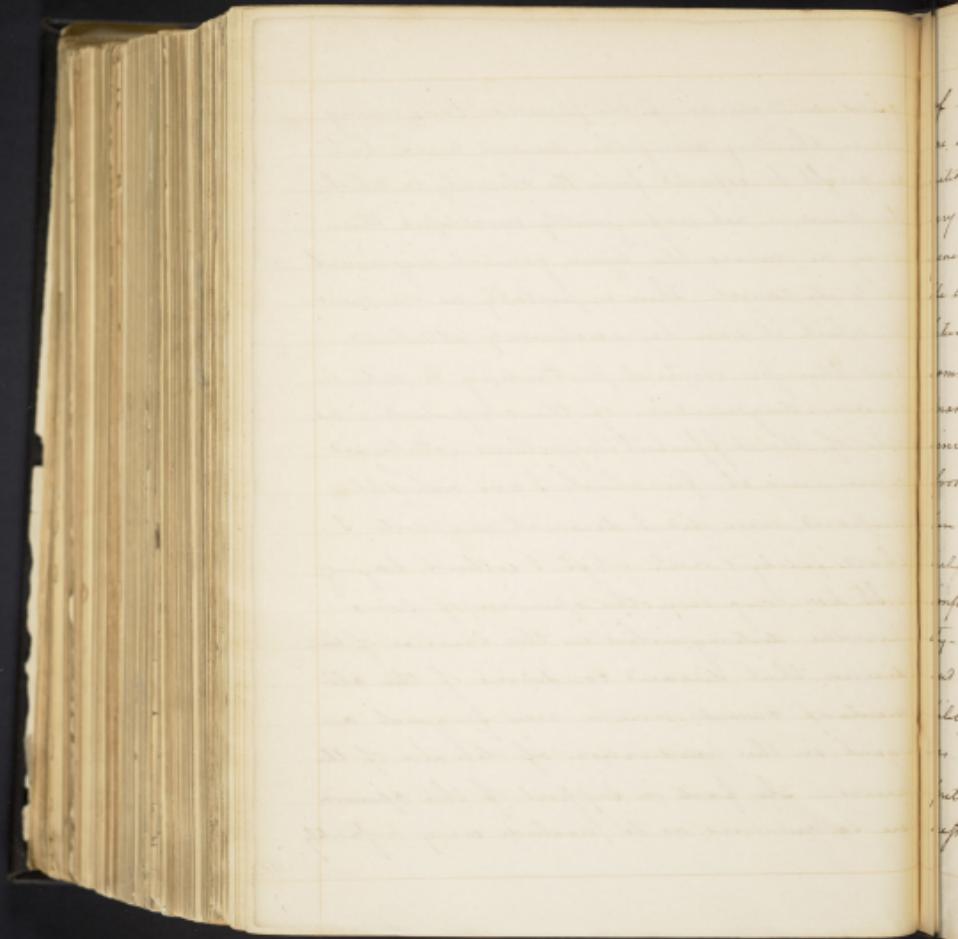
been so very slow as to leave us at the present remote period almost entirely ignorant of its nature, and not much better acquainted with the proper mode of treatment. On the other hand, however, seriously reflecting upon the comparatively rare occurrence of it, and the consequently limited opportunity of deriving, by the aid of dissection, its true pathology, the only probable means by which to deserve an object can be accomplished, and bearing in mind too the deep mystery in which it on very many occasions seems to be involved; and we shall then probably be less disposed to wonder that there should have been a slow progression to its thorough comprehension.

There seems to be a pretty uniform agreement, among those who have had an opportunity of witnessing cases of the disease, as to the nerves commonly primarily af-

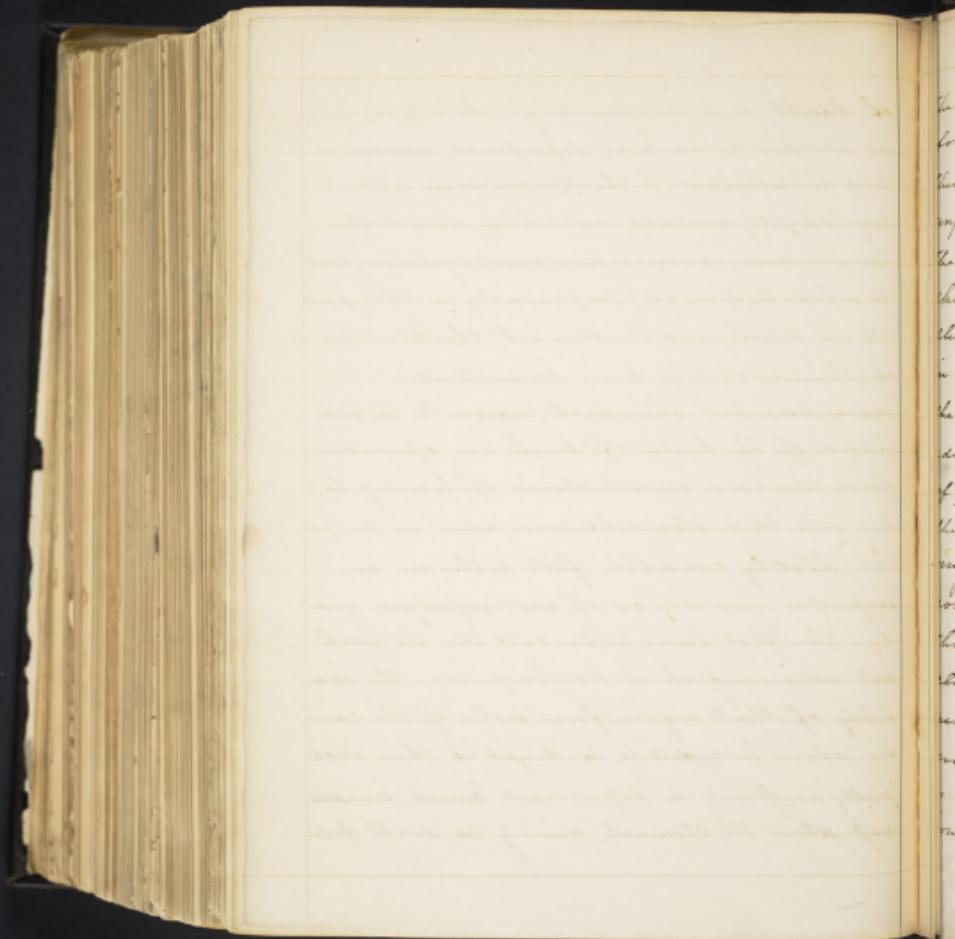


fested, as well as of the peculiar lancinating
pain, shooting along the diseased nerve; but
as might be expected from the obscurity in which
the disease is not unfrequently enveloped, there
is by no means the same general agreement
as to its causes. There is probably no one cause
to which it can be exclusively attributed; -
and therefore without pretending to enter in
to any discussion of the comparative mer-
its of the different hypotheses entertained
concerning it, for which I am not ^{at} all
prepared, even did I deem it requisite, I
shall proceed with what I intend laying

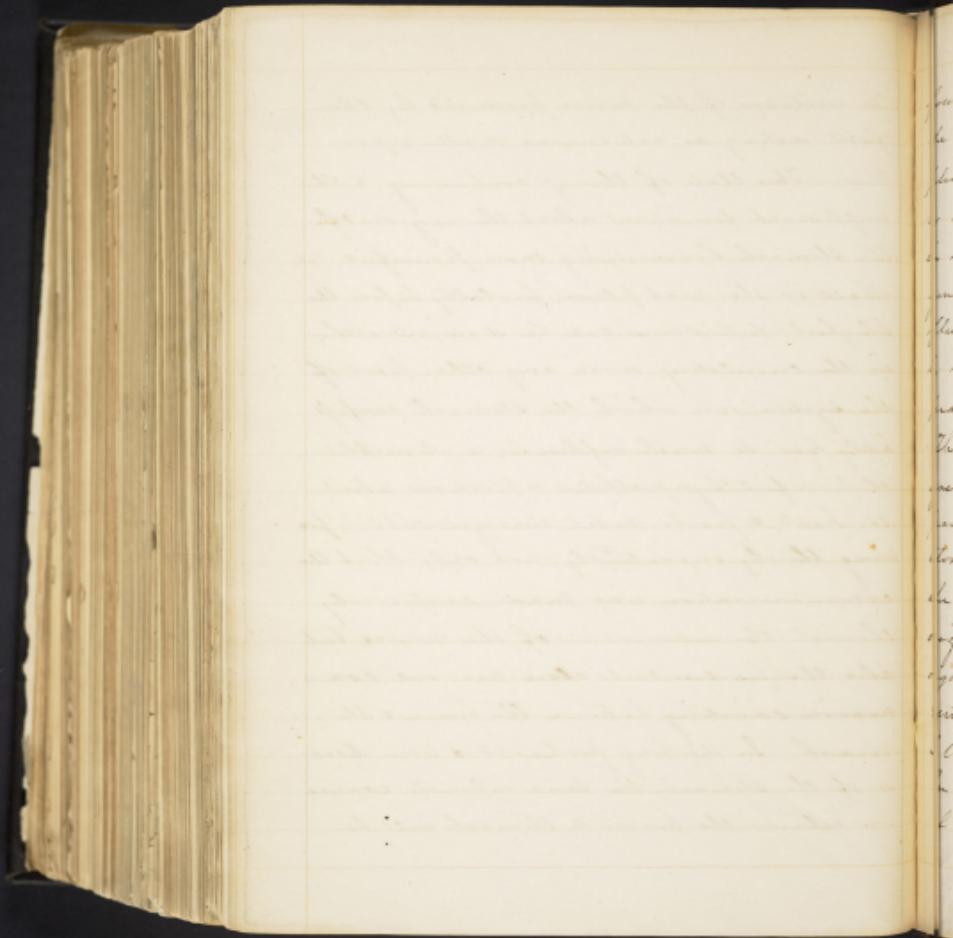
It has long been the opinion of some
persons distinguished in the science of me-
dicine, that diseased conditions of the ali-
mentary canal, are a very frequent a-
gent in the production of diseases of the
nerves. The facts in support of this opinion
are so numerous, as to preclude every probability



of doubt as to its correctness. Indeed every one who has in the most superficial manner directed his attention to the stomach even when very slightly inflated, must have observed the general nervous irritation existing throughout the whole system but especially in those parts between which, and the stomach, the nervous communication is more immediate - many have had abundant reason to be convinced of the truth of such an opinion from the bare circumstance of having taken into their stomachs even when in an excellent, healthy condition, food either in an improper quantity, or of an improper quality - The food being taken into the stomach, and remaining in it too long, from the inability of that organ from either of the causes above alluded to, to digest it, there will pretty uniformly be experienced much uneasiness about the stomach, arising no doubt from

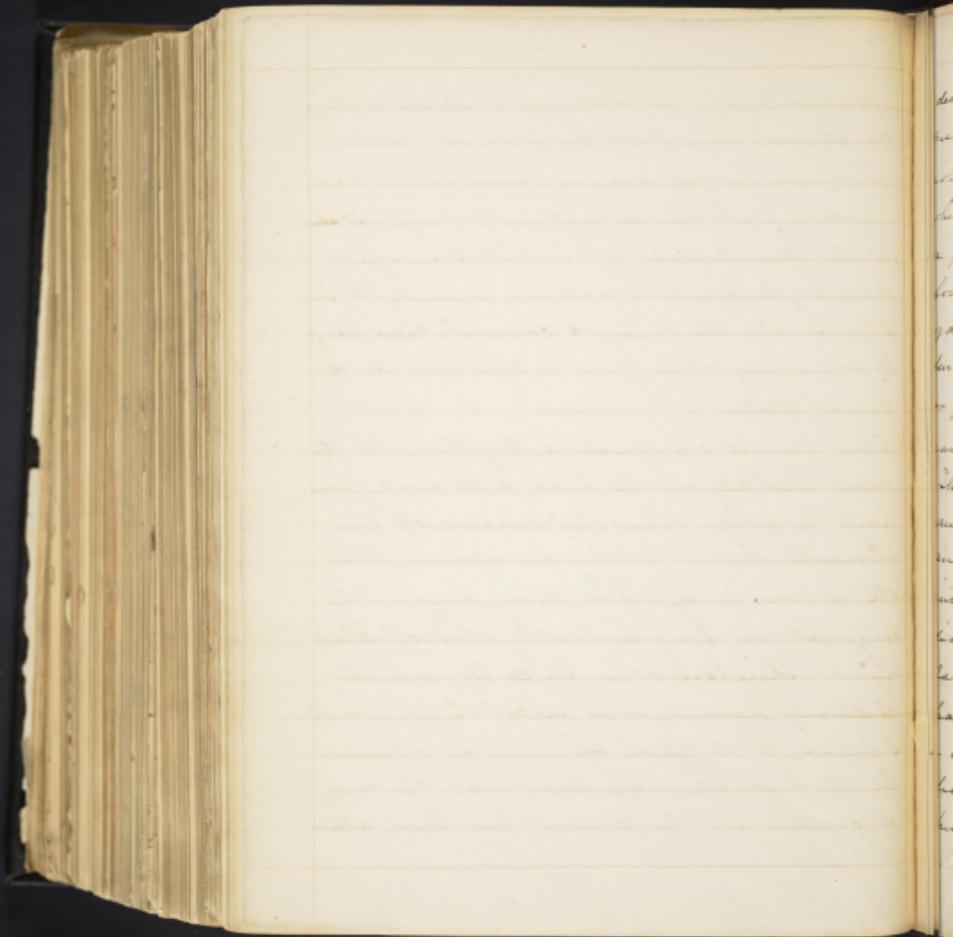


the irritation of the nerves, produced by the food acting as extraneous matter upon them. This state of things continuing & the unpleasant sensations about the region of the stomach becoming more painful, we shall in the next place, probably before the slight disturbance can be discerned either in the circulatory, or in any other part of the system, one which the stomach config-
edly has so much influence, & removal
of painful sympathetic affections about the head & parts most contiguous to it, pro-
ving thereby uncontestedly, not only, that the
communication was made exclusively
through the intervention of the nerves, but
also the particularly close nervous con-
nection existing between the brain & sto-
mach. In the long protracted & severe dis-
ease of the stomach, the same intimate connec-
tion between the brain & stomach will be



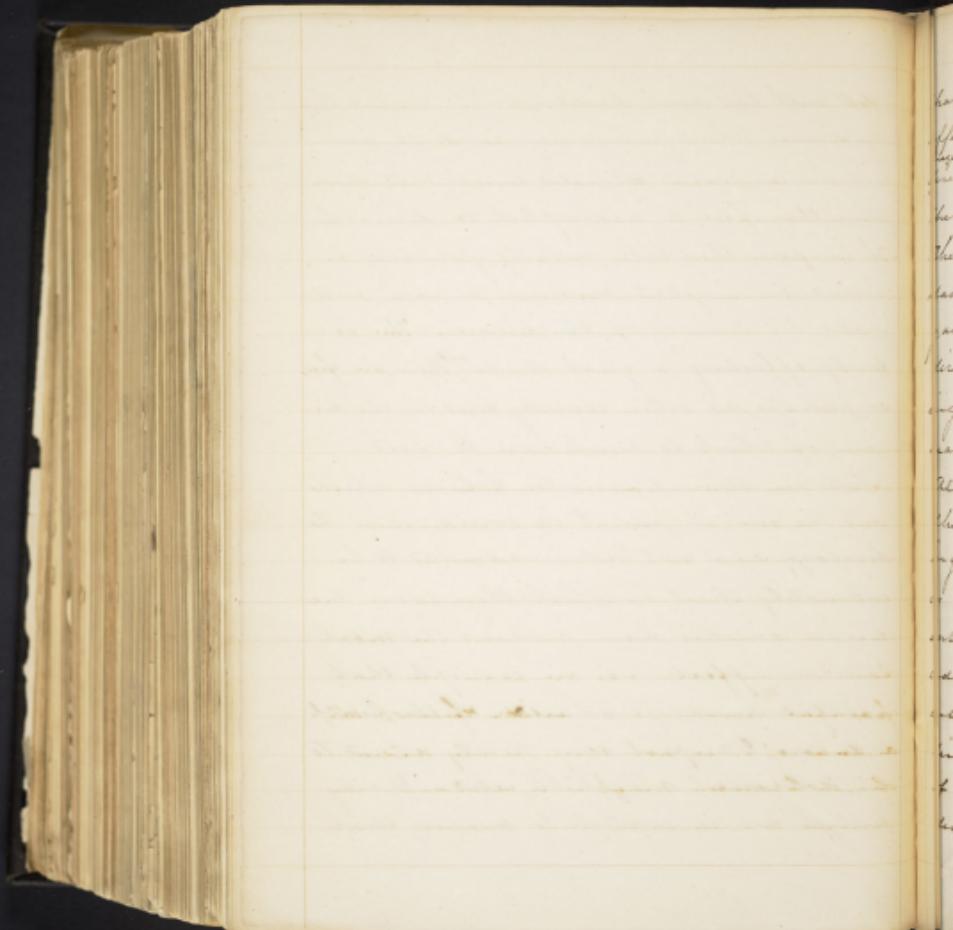
found to exist - for although in such a case the stomach will probably, from its multiplied nervous connections, cause almost every other part of the system to participate in its diseased state, yet will it I imagine generally be found to exercise mainly its influence over the brain & cause it more largely than any other part to share in its diseased state -

These general considerations, together with the great liability of the head & its contiguous parts to suffer from the diseases of the stomach, fully justify an opinion, that the disease in question may frequently originate in some unhealthy state of that organ. There are other facts too, which certainly have a very direct tendency as I think, to support ~~of~~ such an opinion. In the first place we know that the use of emetics in the disease, has been al-



ded with the most decided benefit. Indeed these
medicines when judiciously employed have
not unfrequently effected cures - and even
when they fail to accomplish so desirable
a purpose, they will probably generally be
found in a great measure to have mitigated
the severity of the disease. This is -
tremely effecting a great deal - There are few
or perhaps no other remedy, and in the dis-
ease, of which so much can be said -

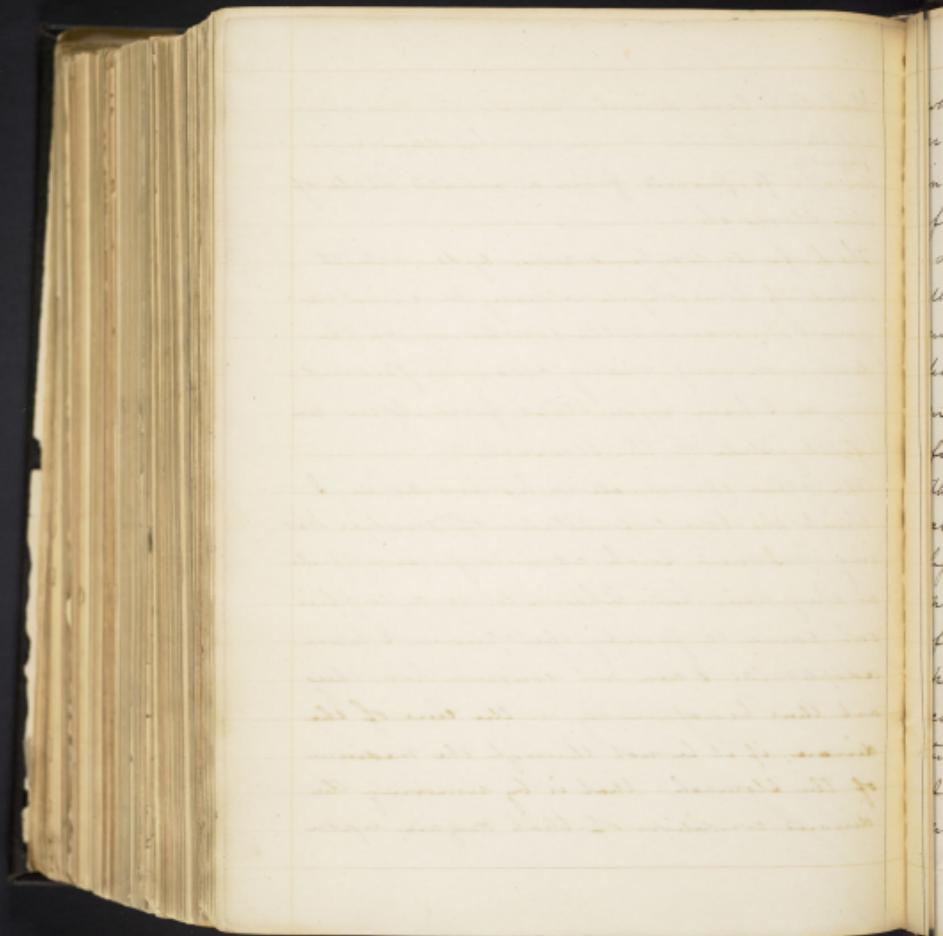
There are other diseases too between which
and the one at present in consideration the
analogy can not but be admitted to be
intimately strict in which there some me-
dicines sometimes have produced the most
calamitous effects - As an example, that
painful neuralgic affection of the scalp
a disease I suspect very nearly allied to
be dolent. might be cited - It may
perhaps not be improper to mention, that



that this last disease, namely the neuralgic affection of the heart, can be ^{frequently} derived directly from a violent state of the stomach -

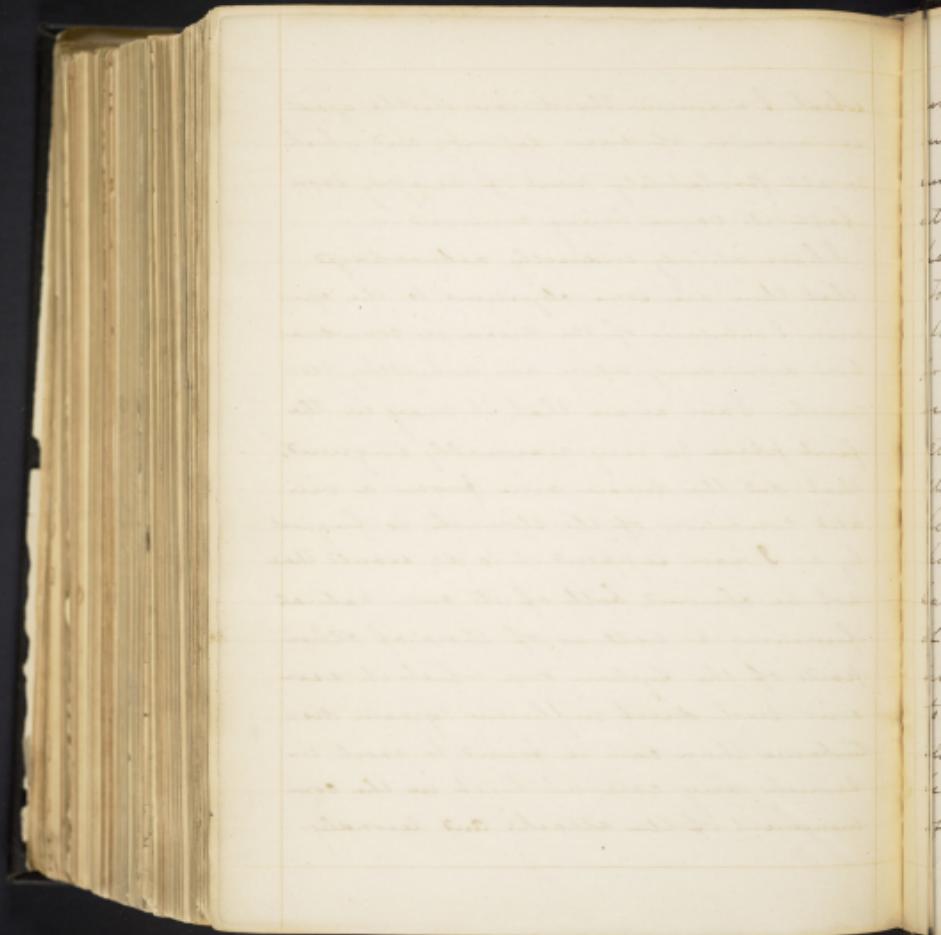
These facts combined certainly do, notwithstanding some objections may be raised against it, warrant the conclusion, of the disease on very many occasions proceeding, as I have before stated, from some unhealthy state of the stomach -

All other considerations however aside, I think the bare circumstance of emetics having produced such advantageous effects as they have been shown to do, a sufficient cause to justify the opinion I have adopted; as I can not conceive how they act thus beneficially, in the cure of the disease, if it be not through the medium of the stomach - that is by removing the diseased condition of that organ, upon

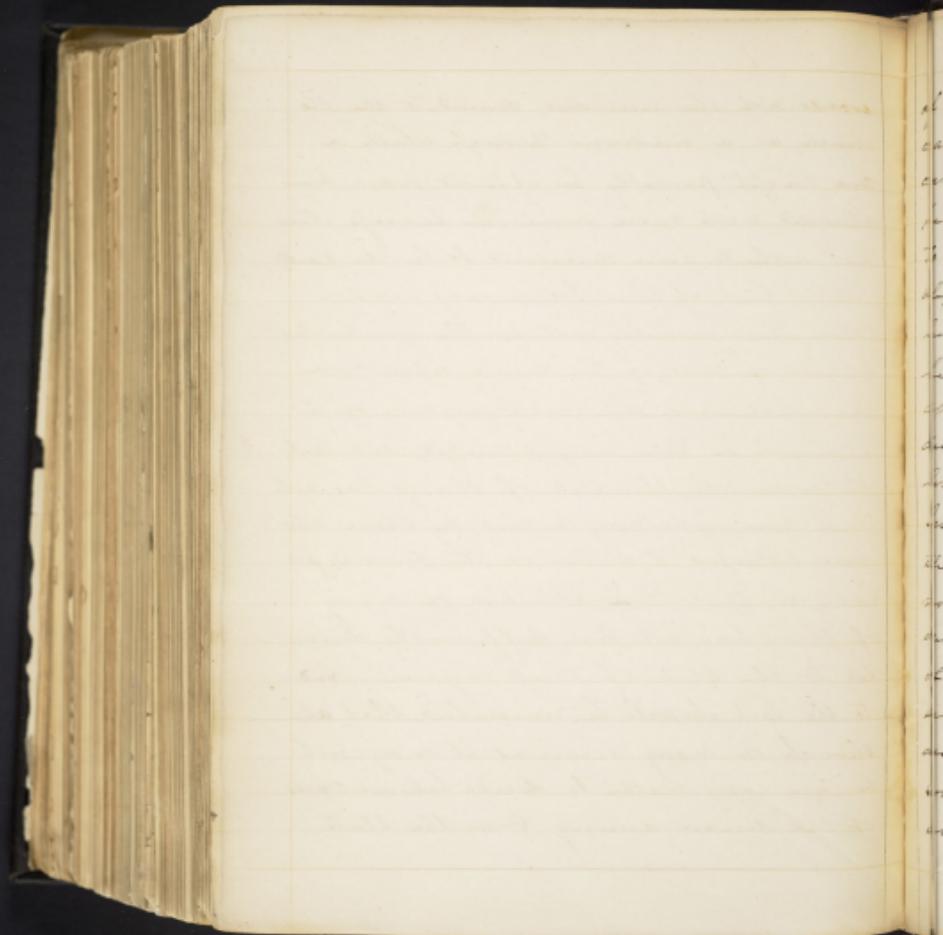


which I maintain the disease in the greatest
or number of cases depends; and which
in all probability most of us ^{will} ~~ever~~ soon
fall, its cause being removed —

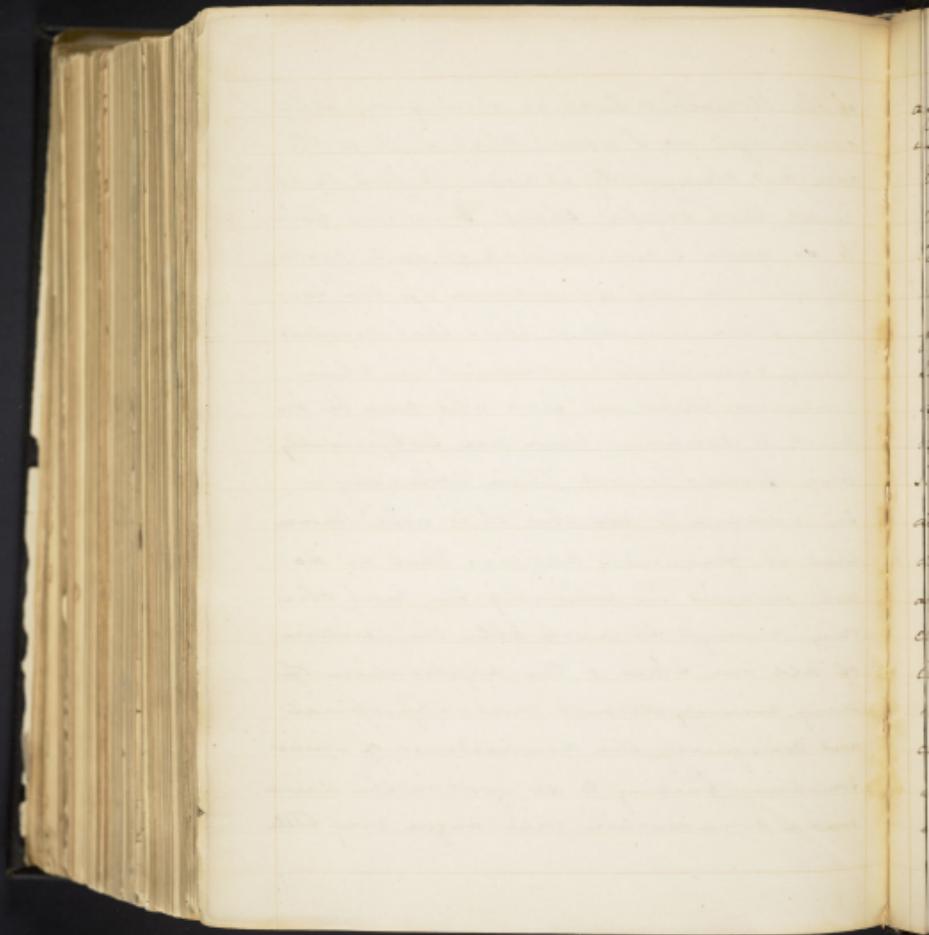
I have already indirectly acknowledged
that there are some objections to the opin-
ion I entertain of the disease in considera-
tion depending upon an unhealthy sto-
mach. I am aware that it may in the
first place be very reasonably enquired,
that did the disease arise from a viti-
ated condition of the stomach, so frequent
by as I have supposed it to do, would there
not be observed, both of its own natural
functions, as well as of those of other
parts of the system over which it ex-
erts such direct influence, greater dis-
turbance than can be found to exist in
nearly any case, at least in the com-
mencement of the attack; and secondly —



would not the remedies, directed to the Stomach, as a medium through which a cure might probably be effected, have been attended with more uniform success than has hitherto been discerned to be the case? To the first of these I can only reply, that there probably will in the greater proportion of cases of the disease, upon close examination, be discerned symptoms of a Stomach in some way deranged; and that the cause why this state of things has not been more generally noticed by those who have attended, & written on the disease, probably is, that their attention of many of them has not been sufficiently directed to the state of that organ. And to the last it will be unobjectionable that although on many occasions it may not be an easy matter to decide between causes of the disease arising from the state

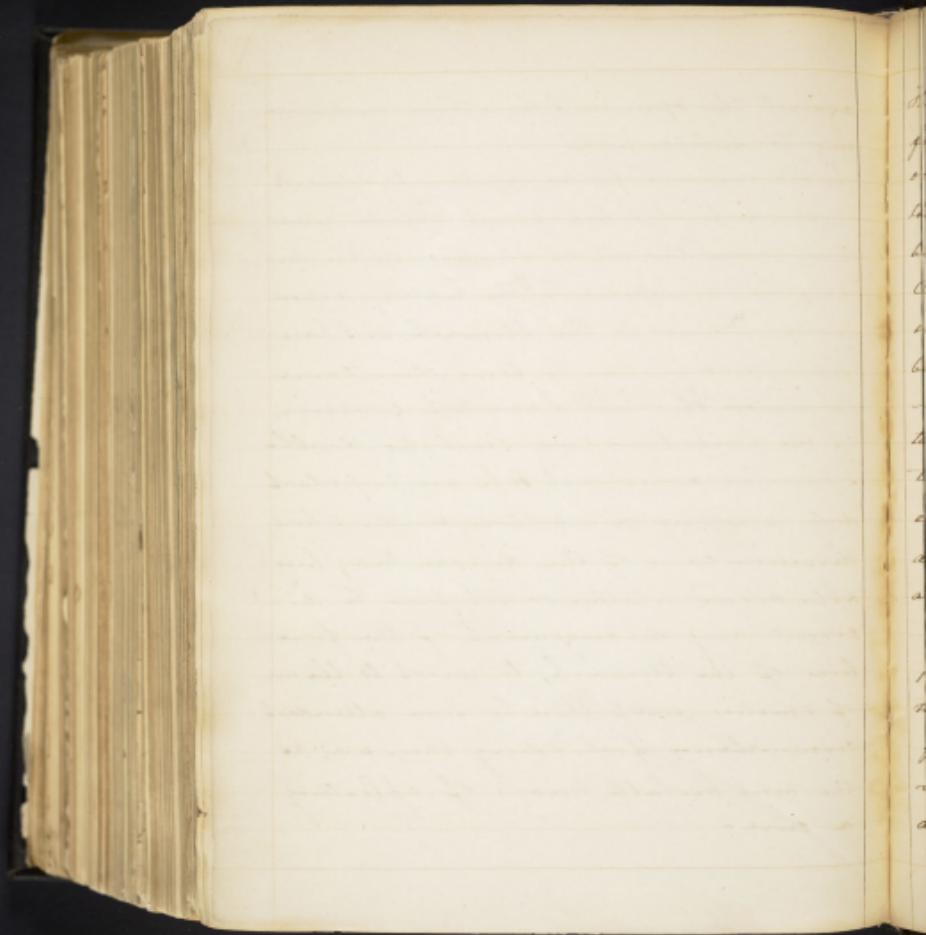


of the Stomach, & such as arise from other
causes, yet do I admit that such is the
case, and consequently it can not but be ad-
mitted that emetics should sometimes fail
to do good. I moreover think it quite proba-
ble, that one very great cause of the fail-
ure of the remedy is this - that emetics
being exceedingly unpleasant in their
operation, there are few who can be in-
duced to continue them for sufficiently
long, fairly to test their efficacy -
In addition to all this, it is well known
that it frequently happens, that we do
not succeed in relieving the most ob-
noxious disordered Stomach after the exertion
of all our Skill, & the application of
very remedy deemed most appropriate;
and consequently, the circumstances of emetics
sometimes failing to do good in the disease
under consideration, will argue very little



against the opinion I have been endeavouring to substantiate.

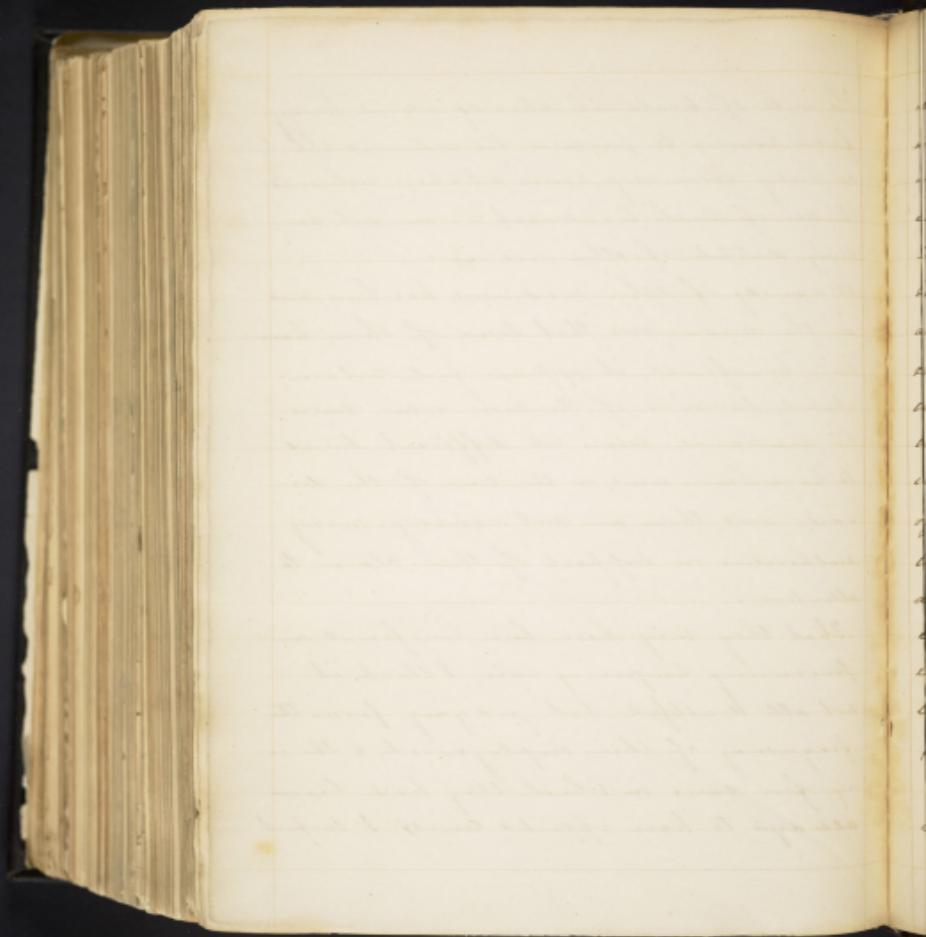
It only remains for me further to remark that whether the beneficial effects resulting from the use of emetics in the disease can be attributed to the healthy action first induced in the Stomach as I have supposed, or whether to some other cause of which I can not conceive; of the fact there can exist no doubt I therefore conceive it to be an important duty devolving on all those, under whose direction cases of the disease may hereafter occur, whether or not there be discerned any derangement of the function of the Stomach, to resort to the use of emetics, only there be some attendant circumstance forbidding their use, as the most probable means of effecting a cure.



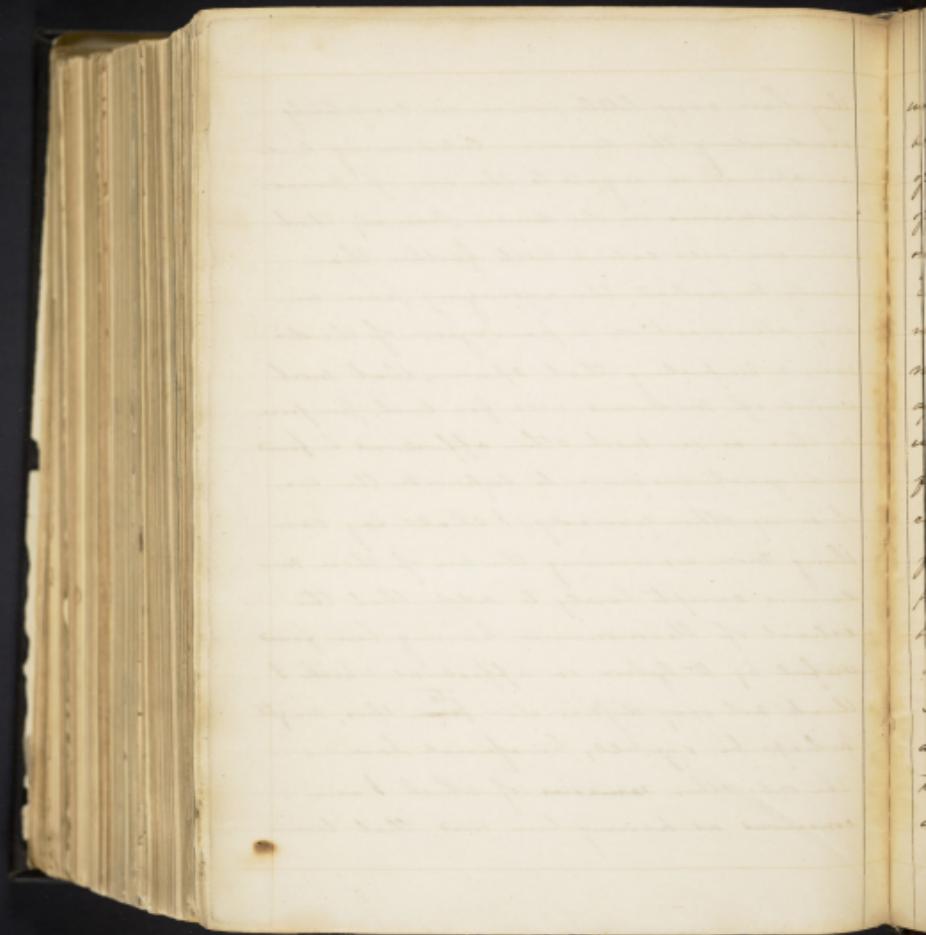
The mode of treatment already adopted having failed however to produce the intended effect, or being from any cause whatever unsuited the case of such treatment, we are not entirely destitute of other resources.

A variety of other medicines has been used in the disease, and that some of them have been beneficial, it appears quite certain. Nearly the whole of the more active nervous medicines, seem at different times to have been used in the case of the disease; and there are not wanting many authorities in support of their claim to attention.

That they may have been beneficial in procuring temporary ease, I think it not all doubtful, but judging from the frequency of their employment, & the very few cases in which they have been alleged to have effects truly, I suspect



they have very little power in completely
eradicating the disease. Entertaining such
an opinion in regard to the use of various
medicines in the disease, namely that
they will extend little farther than
barely to palliate the agonizing pain occi-
ally attendant on a paroxysm of the dis-
ease, & supposing that opium, that most
useful of medicines will for such purpose
in this, as in most other affections be found
in a great measure to supersede the use
of every other remedy, I shall say no-
thing more concerning the use of these me-
dicines, except barely to add, that the
extract of the common hemlock having been found
useful by Dr. Gibon in affections which I
think not very dissimilar ^{to} this, might
perhaps be equally beneficial here—
The only other remains of which I am -
conscious as having been used, that can



worthy of any notice, are local irritants
bleeding both generally & topically, some
of the martial preparations & the division
of the affections never. We are told by Dr. Gray
my, that in the case of a young woman
which came under his direction, bearing -
many of the symptoms of anæsthesia, the
most decided benefit was obtained by the
application of a blit se, together with the
use of purgative medicines. He goes on
further to state that this is not an un-
common occurrence in the early part of
female life, & that he believes it to de-
pend almost exclusively upon an un-
healthy state of the stomach, or bowels -
of the correctness of such an opinion
I entertain no doubt; and equally satisfied
am I, that the benefit, which resulted from
the use of the remedies above mentioned
is mainly to be attributed to the purgatives

in the middle of the day
and you can see the
big white birds flying in
clouds over the water. It
is a very nice place to

Bleeding general & local has been practiced under the idea that the disease depends upon an increased circulation in the vessels of the brain. Should such a state of things be ascertained to exist, the plan of treatment just mentioned would certainly be very appropriate. This however I suspect is rarely the case, and bleeding probably ought not to be ranked among the remedies of the disease.

Tonics as I before mentioned, have also been used here. There is however by no means a general concurrence of opinion as respects them - some of the most distinguished physicians considering them as having scarcely any claim what ever to attention, while others, whose opinions are certainly entitled to respect, speak of their decided utility in the most unreserved manner. To reconcile such concordancy of opinion, may appear some-

what difficult, though my own experience inclines me to the adoption of the latter opinion. Certain I am that some ^{or} of these medicines has occasionally produced much advantage, but to what particular cases of the disease it is best adopted I am unable to say - perhaps to those cases in which great debility exists, whether original or brought on by the more active means of cure -

The medicine to which I have just alluded, the Extract of Liver, undoubtedly did, in the only case in which I have ever seen it used, produce the most decided advantage. This was the case of an aged lady, who being extremely feeble & delicate, & having no symptoms of disease, save that of the affected knee, was directed to use the ²⁰ ~~20~~ ^{or} 30 gr. doses several times a day -

This however proving insufficient to arrest the disease, the dose was gradually

increased to double the quantity, when all the symptoms disappeared. In this state the patient remained free from all pain, until, after a considerable lapse of time, being from some cause much excited, the disease returned with all its former violence. The tonic was again immediately resorted to in similar doses & with the same good effect.

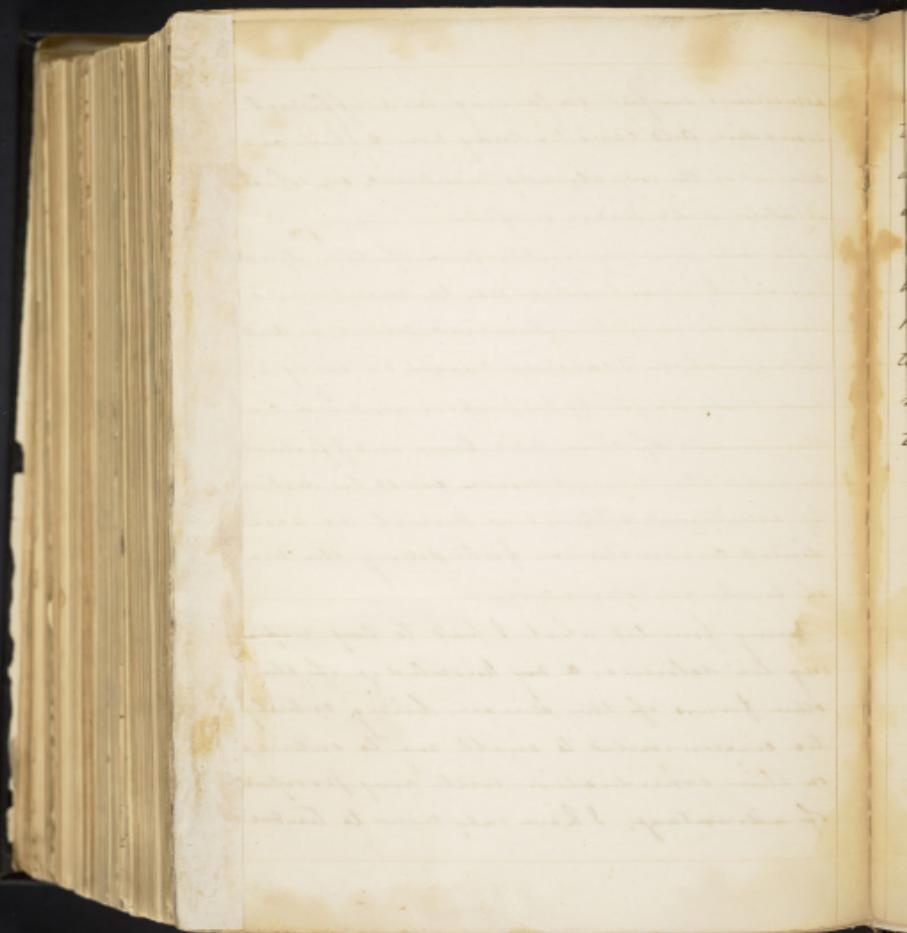
Several other cases have also lately been reported to me, in which this medicine has acted with the same good effect. of the circumstances attending these cases however I know nothing, and have only noticed them with a view of attracting attention to the use of the remedy.

It will readily be imagined from what I have previously said, that I should by no means be disposed to rely upon it as an exclusive remedy, though it may

sometimes useful in aiding more efficient remedies. And cases too may now & then occur, as in the one already mentioned, in which it alone will prove useful.

The only remedy in the cure of the disease which it remains for me to mention, is the division of the disease nerve — And this operation I conceive might, in every case with propriety be performed, where other means of cure had been ineffectual: provided the disease nerve could be distinctly ascertained. & there were present no accidental circumstances forbidding the use of such an operation —

Having finished what I had to say respecting his dolourous, & my knowledge of the other forms of the disease, being entirely too circumscribed to enable me to enter upon this consideration with any prospect of advantage, I have only now to tender



my thanks to the professors for the opportunities which they have kindly afforded me of profiting by their lectures, & to express a hope that the time may not long arrive when some one of the members of their school shall distinguish himself by disclosing the now obscure pathology of this disease, & adopting a more rational mode of treatment -

Thomson.

